

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A personal information manager comprising:

a microprocessor;

memory operably connected to the microprocessor and storing a database;

a data input device operably connected to the microprocessor and configured to receive an audio data stream and decode the received audio data stream into text;

said database storing decoded text, and a table of explicit commands;

a dialog manager module executed by the microprocessor and having a record mode and a dialog mode, in said record mode said dialog manager ~~configured to examine~~ comparing said decoded text received from said data input device with said table of explicit commands to determine whether it contains ~~an explicit or an implicit data processing request, an explicit request being a request explicitly requested by a user and~~ which is immediately passed to the microprocessor for execution;

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~~and an implicit request being a request which is implicitly specified by the user and which is queued and processed by the microprocessor in the background between explicit requests, in said dialog mode said dialog manager is configured to treat all requests as explicit data processing requests;~~

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an information storage/retrieval module executed by the microprocessor and storing and retrieving ~~data text to/from said database, said information storage/retrieval~~ module handling implicit and explicit data processing requests specified by said dialog manager, in said record mode said dialog manager module instructing the information storage/retrieval module to store decoded text, excluding explicit data processing requests, in said database memory; ~~and~~

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said dialog manager module examining text stored in said database during periods of microprocessor inactivity to determine whether the stored text contains implicit data processing requests, where implicit processing requests are determined by examining a semantic class of the stored text, said dialog manager module adding implicit processing

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requests to an implicit processing queue and executing implicit processing requests
during periods of microprocessor inactivity; and

an output module converting text received from said dialog manager module into speech and outputting said speech in response to a data processing request;

~~wherein said dialog manager passes implicit processing requests to said information storage/retrieval module during periods of inactivity.~~

2. (Canceled)

3. (Previously Presented) The personal information manager according to claim 1, wherein said dialog manager module identifies an explicit data processing request during said dialog mode by comparing said decoded text against a list of predefined data processing requests, assigning a match score to each of said predefined data processing requests and selecting said predefined data processing request having a highest matching score as said explicit data processing request.

4. (Previously Presented) The personal information manager according to claim 3, wherein if said highest matching score is less than a threshold score said dialog manager module passes an instruction to said output module to prompt the user to select a given data processing request from among a selected number of said predefined data processing requests.

5. (Previously Presented) The personal information manager according to claim 1, wherein said information storage/retrieval module passes to said dialog manager module a specified number of data records retrieved in response to said data processing request if a number of retrieved data records is below a threshold number and otherwise passes characteristic words selected from said retrieved data records, and said dialog manager module instructs said output module to prompt the user to select a given said characteristic word used refine the data processing request.

6. (Previously Presented) The personal information manager according to claim 1, further comprising:

a global word table containing a list of all of the words stored in the database; and
said dialog manager module examining decoded text received from said data input device
to determine whether it matches to a given said word in said global word table;

wherein a request to prompt the user for clarification is queued if the decoded text
does not match any word in said global word table.

7. (Previously Presented) The personal information manager according to claim 1, further
comprising:

a local word table in said database memory;

said information storage/retrieval module stores atoms of data, each said atom
having a unique identifier; and

said local word table containing a list of words contained in each atom of data and
the number of times each word appears in a given atom;

wherein if a number of atoms matching a data retrieval request exceeds a
predetermined number, said dialog manager module prompts a user to select a given
characteristic word from a list of characteristic words, said characteristic words being
derived from the local word tables of atoms matching said data retrieval request, said
selected characteristic word being appended to a search string of the data retrieval
request, thereby reducing the number of atoms matching a data retrieval request.

8. (Original) The personal information manager according to claim 7, wherein said
characteristic words are derived by selecting a predetermined number of the most
frequently occurring words from the local word tables of the atoms matching a data
retrieval request, provided that that the selected word does not already appear in the
search string of the data retrieval request.

9. (Canceled)

10. (Currently Amended) A personal information manager comprising:

a microprocessor;

memory operably connected to the microprocessor and storing a database;

a data input device operably connected to the microprocessor and configured to receive an audio data stream and decode the received audio data stream into text;

said database storing decoded text, and a table of explicit commands, each said explicit command being associated at least one argument;

a dialog manager module executed by the microprocessor, said dialog manager comparing said decoded text received from said data input device with said table of explicit commands and assigning a match score to the decoded text, said dialog manager module ranks the match score of the decoded text and if a match score assigned to a given word of decoded text is greater than a threshold score then a user intention is judged recognized, and the dialog manager module assigns values determined from the decoded text to the at least one arguments associated with the explicit command;

~~and having a record mode and a dialog mode, in said record mode said dialog manager module configured to examine said decoded text received from said data input device to determine whether it contains an explicit data processing request, an explicit request being a request immediately passed to the microprocessor for execution, in said dialog mode said dialog manager module is configured to treat all requests as explicit data processing requests;~~

an information storage/retrieval module executed by the microprocessor and storing and retrieving data-text to/from said database in response to explicit commands received from the dialog manager, said information storage/retrieval module handling explicit data processing requests specified by said dialog manager module, in said record mode said dialog manager module instructing the information storage/retrieval module to store decoded text, excluding explicit data processing requests, in said memory; and

an output module converting text received from said dialog manager module into speech and outputting said speech in response to a data processing request;

~~wherein said dialog manager module passes implicit processing requests to said information storage/retrieval module during periods of inactivity.~~

11. (Canceled)

12. (Canceled)

13. (New) A personal information manager comprising:

a microprocessor;

memory operably connected to the microprocessor and storing a database;

a data input device operably connected to the microprocessor and configured to receive an audio data stream and decode the received audio data stream into text;

said database storing decoded text, and a table of explicit commands, each said explicit command being associated with at least one argument;

a dialog manager module executed by the microprocessor, said dialog manager comparing said decoded text received from said data input device with said table of explicit commands, if said decoded text matches one of explicit commands, said dialog manager will assign values determined from the decoded text to the at least one arguments associated with the explicit command;

an information storage/retrieval module executed by the microprocessor storing and retrieving text to/from said database in response to explicit commands received from the dialog manager; and

an output module converting text received from said dialog manager module into speech and outputting said speech in response to a data processing request,

wherein if the argument specified in said explicit command corresponds to a unique entry in the database then the information storage/retrieval module will perform the actions associated with the explicit command, otherwise the information storage/retrieval module will instruct the dialog manager module that the argument is ambiguous and the dialog manager module pass a prompt for clarification of the argument to the output module.

14. (New) The personal information manager of claim 13, wherein the database further includes at least one dedicated database selected from the list Calendar and Contacts, said Calendar database storing at least one of Dates and Times of appointments, and said Contacts database storing address information.

15. (New) The personal information manager of claim 14, wherein one or more explicit commands may be associated with two or more spoken outputs, wherein the output

module randomly selects one of the spoken outputs associated with a given explicit command.

16. (New) The personal information manager of claim 13, wherein the decoded text is stored as a semi-structured collection of atoms.

17. (New) The personal information manager of claim 14, wherein data is stored/retrieved to/from the least one dedicated database in response to explicit commands.

18. (New) The personal information manager of claim 14, where said dialog manager module has a record mode and a dialog mode, in said record mode said dialog manager module comparing said decoded text received with said table of explicit commands to determine whether it contains an explicit command, if said decoded text does not match one of the explicit commands then the said dialog manager stores the decoded text in said database.

19. (New) The personal information manager of claim 18, where said dialog manager module examines text stored in said database to determine whether the stored text contains implicit data processing requests, where implicit data processing requests are determined by examining a semantic class of the text, said dialog manager module adding implicit processing requests to an implicit processing queue and executing implicit processing requests during periods of microprocessor inactivity.

20. (New) The personal information manager of claim 19, where data is stored in the least one dedicated database in response to implicit data processing requests.

21. (New) The personal information manager according to claim 13, wherein if said decoded text matches more than one explicit command in said explicit command table then said dialog manager module assigns a match score to each of said explicit

commands and selects said explicit command having a highest match score as said explicit command.

22. (New) The personal information manager according to claim 21, wherein if said highest match score is less than a threshold score then said dialog manager module passes an instruction to said output module to prompt the user to select a given explicit command from among a selected number of said explicit commands.

23. (New) The personal information manager according to claim 13, wherein if the information storage/retrieval module judges that the argument is ambiguous it will pass characteristic words selected from data records corresponding to the argument to the dialog manager module, and said dialog manager module instructs said output module to prompt the user to select a given said characteristic word used refine the data processing request.

24. (New) The personal information manager according to claim 13, further comprising:
a global word table containing a list of all of the words stored in the database; and
said dialog manager module examining decoded text received from said data input device to determine whether it matches to a given said word in said global word table;
wherein a request to prompt the user for clarification is queued if the decoded text does not match any word in said global word table.

25. (New) The personal information manager according to claim 13, further comprising:
a local word table in said database;
said information storage/retrieval module stores the decoded text as atoms of data in the database, each said atom having a unique identifier; and
said local word table containing a list of words contained in each atom of data and the number of times each word appears in a given atom;
wherein if a number of atoms matching a data retrieval request exceeds a predetermined number, said dialog manager module prompts a user to select a given characteristic word from a list of characteristic words, said characteristic words being

derived from the local word tables of atoms matching said data retrieval request, said selected characteristic word being appended to a search string of the data retrieval request, thereby reducing the number of atoms matching a data retrieval request.

26. (New) The personal information manager according to claim 25, wherein said characteristic words are derived by selecting a predetermined number of the most frequently occurring words from the local word tables of the atoms matching a data retrieval request, provided that the selected word does not already appear in the search string of the data retrieval request.

27. (New) The personal information manager of claim 10, wherein if the argument specified in said explicit command corresponds to a unique entry in the database then the information storage/retrieval module will perform the actions associated with the explicit command, otherwise the information storage/retrieval module will instruct the dialog manager module that the argument is ambiguous and the dialog manager module pass a prompt for clarification of the argument to the output module.

28. (New) The personal information manager of claim 10 wherein each explicit command is associated with at least one message identifier.

29. (New) The personal information manager of claim 28, where two or more explicit commands are associated with a given message identifier.

30. (New) The personal information manager of claim 10 wherein each explicit command comprises at least one command word, and different explicit command words may be associated with a given message identifier.

31. (New) The personal information manager of claim 10, wherein the database further includes at least one dedicated database selected from the list Calendar and Contacts, said Calendar database storing at least one of Dates and Times of appointments, and said Contacts database storing address information.

32. (New) The personal information manager of claim 10, wherein each explicit command is associated with at least one spoken outputs, wherein the output module randomly selects one of the spoken outputs associated with a given explicit command.

33. (New) The personal information manager of claim 27, wherein each explicit command is associated with at least one spoken outputs, wherein the output module randomly selects one of the spoken outputs associated with a given explicit command.

34. (New) The personal information manager of claim 31, wherein data is stored/retrieved to/from the least one dedicated database in response to explicit commands.

35. (New) The personal information manager of claim 31, where said dialog manager module has a record mode and a dialog mode, in said record mode said dialog manager module comparing said decoded text received with said table of explicit commands to determine whether it contains an explicit command, if said decoded text does not match one of the explicit commands then the said dialog manager stores the decoded text in said database.

36. (New) The personal information manager of claim 35, where said dialog manager module examines text stored in said database to determine whether the stored text contains implicit data processing requests, where implicit data processing requests are determined by examining a semantic class of the text, said dialog manager module adding implicit processing requests to an implicit processing queue and executing implicit processing requests during periods of microprocessor inactivity.

37. (New) The personal information manager of claim 36, where data is stored in the least one dedicated database in response to implicit data processing requests.

38. (New) The personal information manager according to claim 10, wherein if said highest match score is less than a threshold score then said dialog manager module passes an instruction to said output module to prompt the user to select a given explicit command from among a selected number of said explicit commands.

39. (New) The personal information manager according to claim 10, wherein if the information storage/retrieval module judges that the argument is ambiguous it will pass characteristic words selected from data records corresponding to the argument to the dialog manager module, and said dialog manager module instructs said output module to prompt the user to select a given said characteristic word used refine the data processing request.

40. (New) The personal information manager according to claim 10, further comprising:
a global word table containing a list of all of the words stored in the database; and
said dialog manager module examining decoded text received from said data input device to determine whether it matches to a given said word in said global word table;
wherein a request to prompt the user for clarification is queued if the decoded text does not match any word in said global word table.

41. (New) The personal information manager according to claim 10, further comprising:
a local word table in said database;
said information storage/retrieval module stores the decoded text as atoms of data in the database, each said atom having a unique identifier; and
said local word table containing a list of words contained in each atom of data and the number of times each word appears in a given atom;
wherein if a number of atoms matching a data retrieval request exceeds a predetermined number, said dialog manager module prompts a user to select a given characteristic word from a list of characteristic words, said characteristic words being derived from the local word tables of atoms matching said data retrieval request, said selected characteristic word being appended to a search string of the data retrieval request, thereby reducing the number of atoms matching a data retrieval request.

42. (New) The personal information manager according to claim 41, wherein said characteristic words are derived by selecting a predetermined number of the most frequently occurring words from the local word tables of the atoms matching a data retrieval request, provided that that the selected word does not already appear in the search string of the data retrieval request.